

**LAND APPLICATION SITE**

**GORDON ALLIE BARNES**

**DWGAB 1-2**

**DINWIDDIE COUNTY**

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION  
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

**PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS**

A. This land application agreement is made on 7/14/17 between Gordon Barnes referred to here as "Landowner", and Recyc Systems, Inc, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

**Landowner:**

The Landowner is the owner of record of the real property located in Dinwiddie, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>TM 78-P4</u>			
<u>TM 78-P3B</u>			
<u>78-4A</u>			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☒ The Landowner is the sole owner of the properties identified herein.  
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

GORDON BARNES  
Landowner - Printed Name, Title

Gordon Barnes  
Signature

5012 HARPERS RD.  
MCKENNEY, VA 23812 804-586-1622  
Mailing Address & Phone Number

**Permittee:**

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Shunda  
Permittee - Authorized Representative  
Printed Name

Shunda  
Signature

PO Box 562 Remington, Virginia 22734  
Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Recyc Systems, Inc

County or City: Dinwiddie

Landowner: George Glass  
Gordon Barnes

**Landowner Site Management Requirements:**

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
  - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
  - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
  - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
  - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
  - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
  - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
  - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
  - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:
 

Following biosolids application to pasture or hayland sites:

  - a. Meat producing livestock shall not be grazed for 30 days,
  - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
  - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Gordon Barnes

Landowner's Signature

7/14/17

Date

Henry T. Payne

Farm Operator Signature

5112 Lennie Rd. McKenney, Va.  
Mailing Address & Phone Number  
834-955-7814 23822

## Landowner Coordination Form

Permittee: Recyc Systems, Inc

County or City: Dinwiddie County

Signature not required on this page

[illegible]

# FARM DATA SHEET

<b>SITE NAME:</b>	Gordon Allie Barnes	<b>COUNTY:</b>	Dinwiddie
<b>OWNER:</b>	Gordon Allie Barnes	<b>OPERATOR:</b>	Hugh T. Rogers
<b>OWNER'S ADDRESS:</b>	5012 Harpers Rd. McKenney, VA 23872	<b>OPERATOR'S ADDRESS:</b>	5112 Lennie Rd. McKenney, VA 23872
<b>OWNER'S TELEPHONE:</b>	804-586-1622	<b>OPERATOR'S TELEPHONE:</b>	434-955-7814
<b>GENERAL FARM TYPE:</b>	Hay	<b>CELL PHONE:</b>	-
<b># CATTLE:</b>	None	<b>EMAIL:</b>	-
<b>LAGOON or SLURRY:</b>	None	<b>LATITUDE:</b>	36.994
<b>TOPO QUAD:</b>	Warfield Darvills	<b>LONGITUDE:</b>	-77.813
<b>COMMENTS:</b>	<b>METHOD OF DETERMINATION:</b>		Online Maps

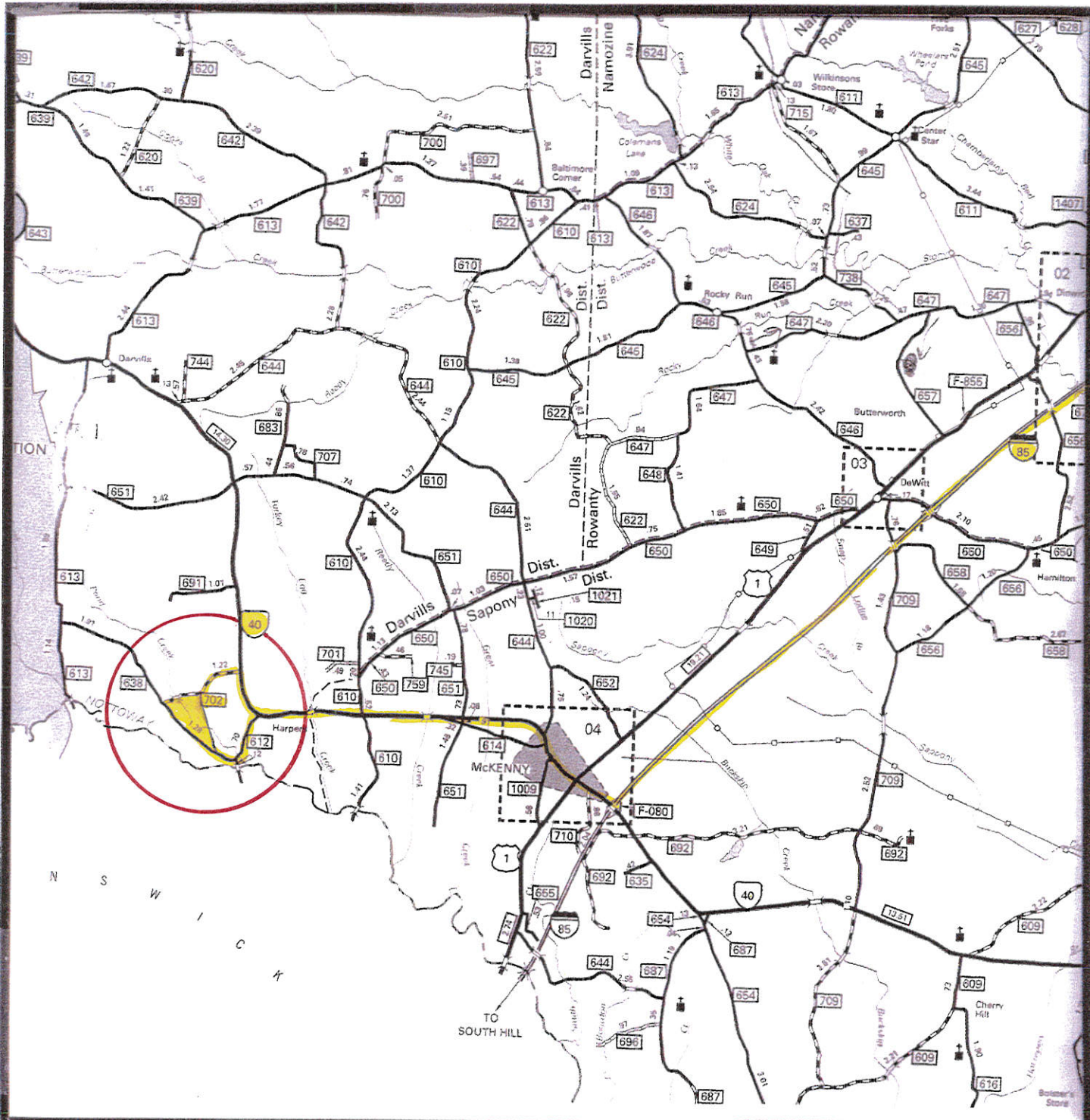
**BB**  
**12-3-19**

# MAPS



# Recyc Systems<sup>TM</sup> Inc.

(Biosolids Land Application)



**Scale:** 1 inch = 2 Miles

DWGAB 1-2

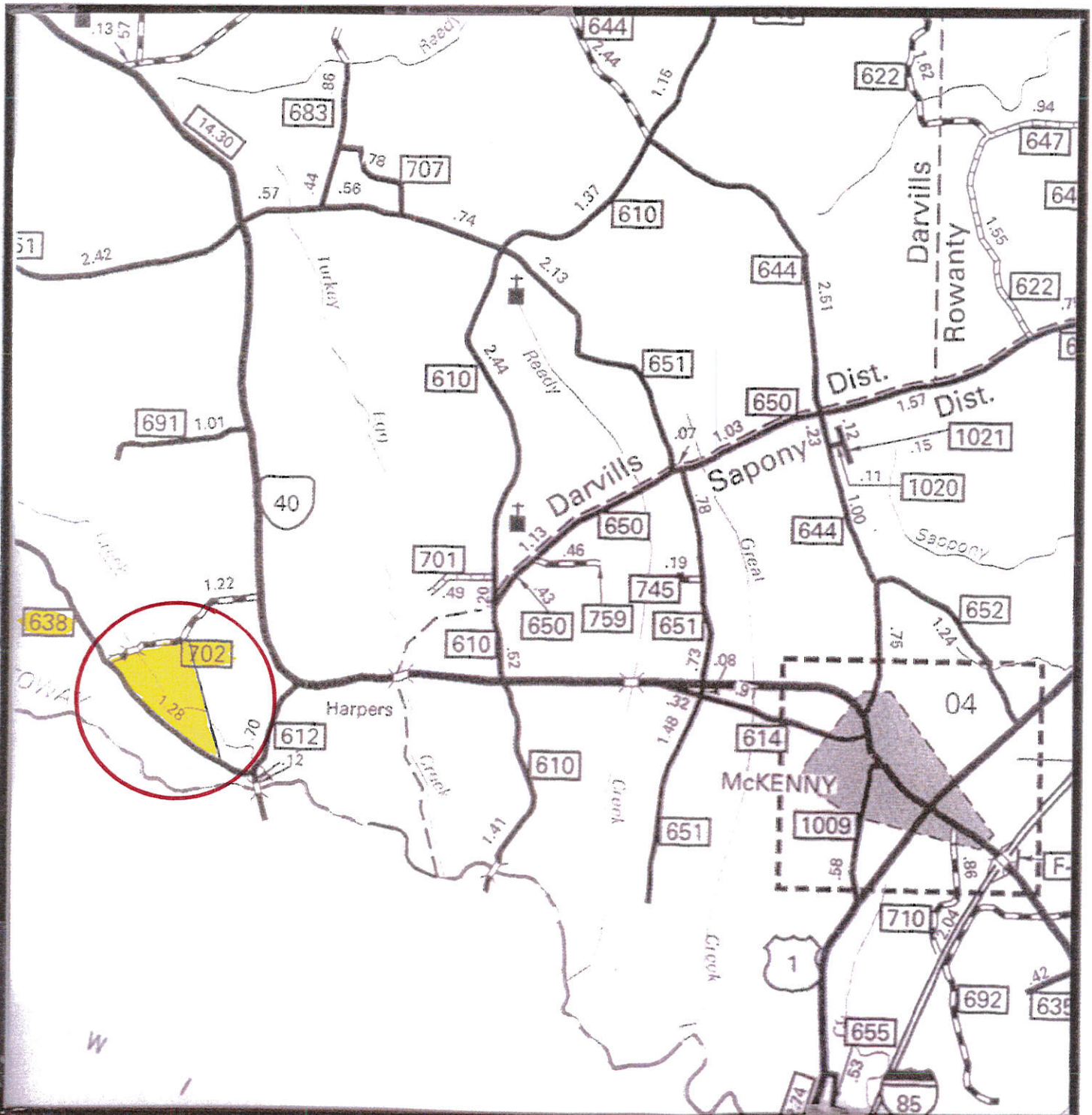
12-3-19

Truck Route marked  
in Yellow

**VICINITY MAP**







**Scale:** 1 inch = 1 Mile

DWGAB 1-2

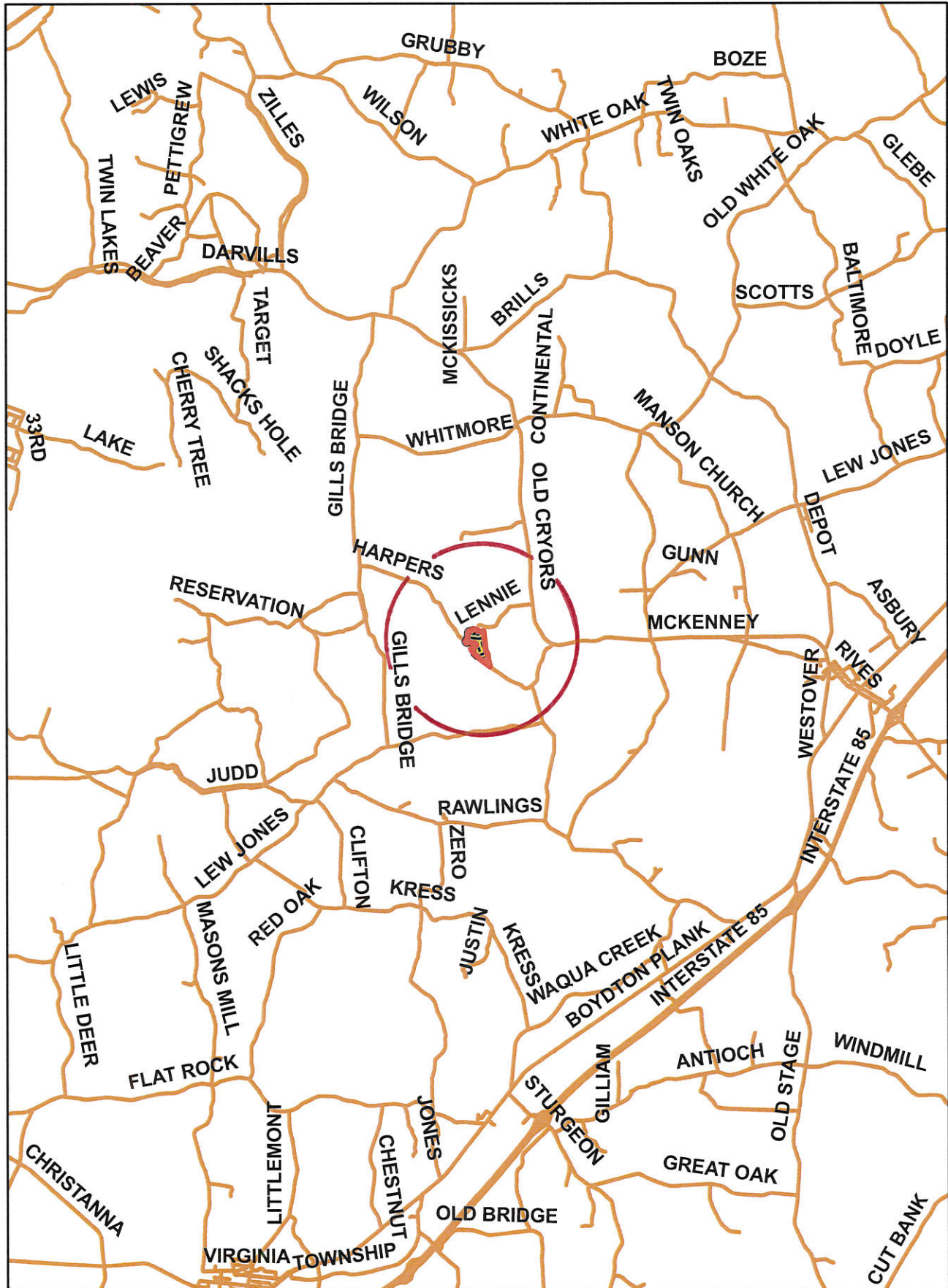
12-3-19

Truck Route marked  
in Yellow

**VICINITY MAP**





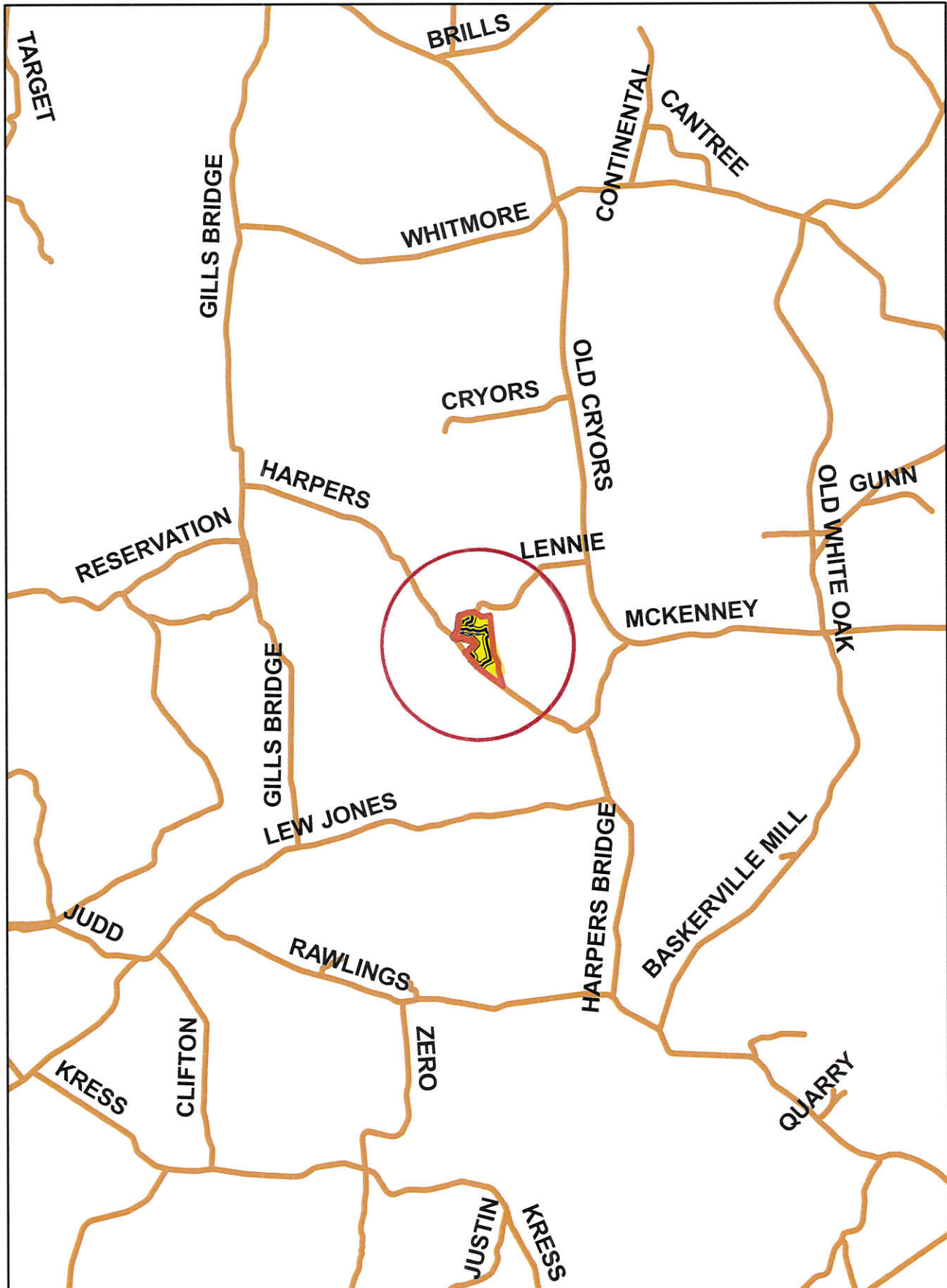


12-3-19

Vicinity Map

1 in = 2 miles



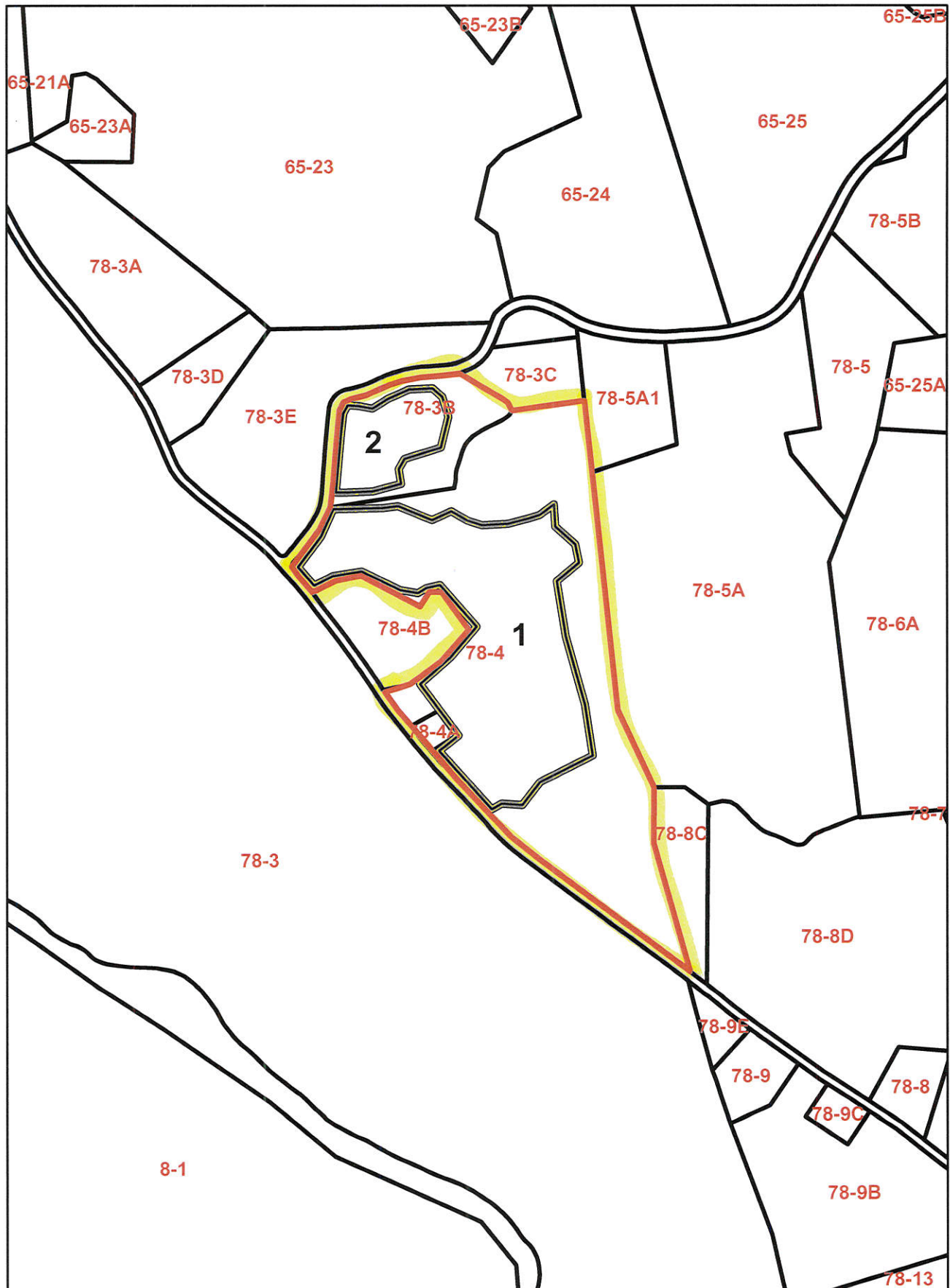


12-3-19

Vicinity Map

1 in = 1 miles





12-3-19

Tax Map

1 in = 660 feet





# ADJOINING LANDOWNERS

**Gordon Allie Barnes**

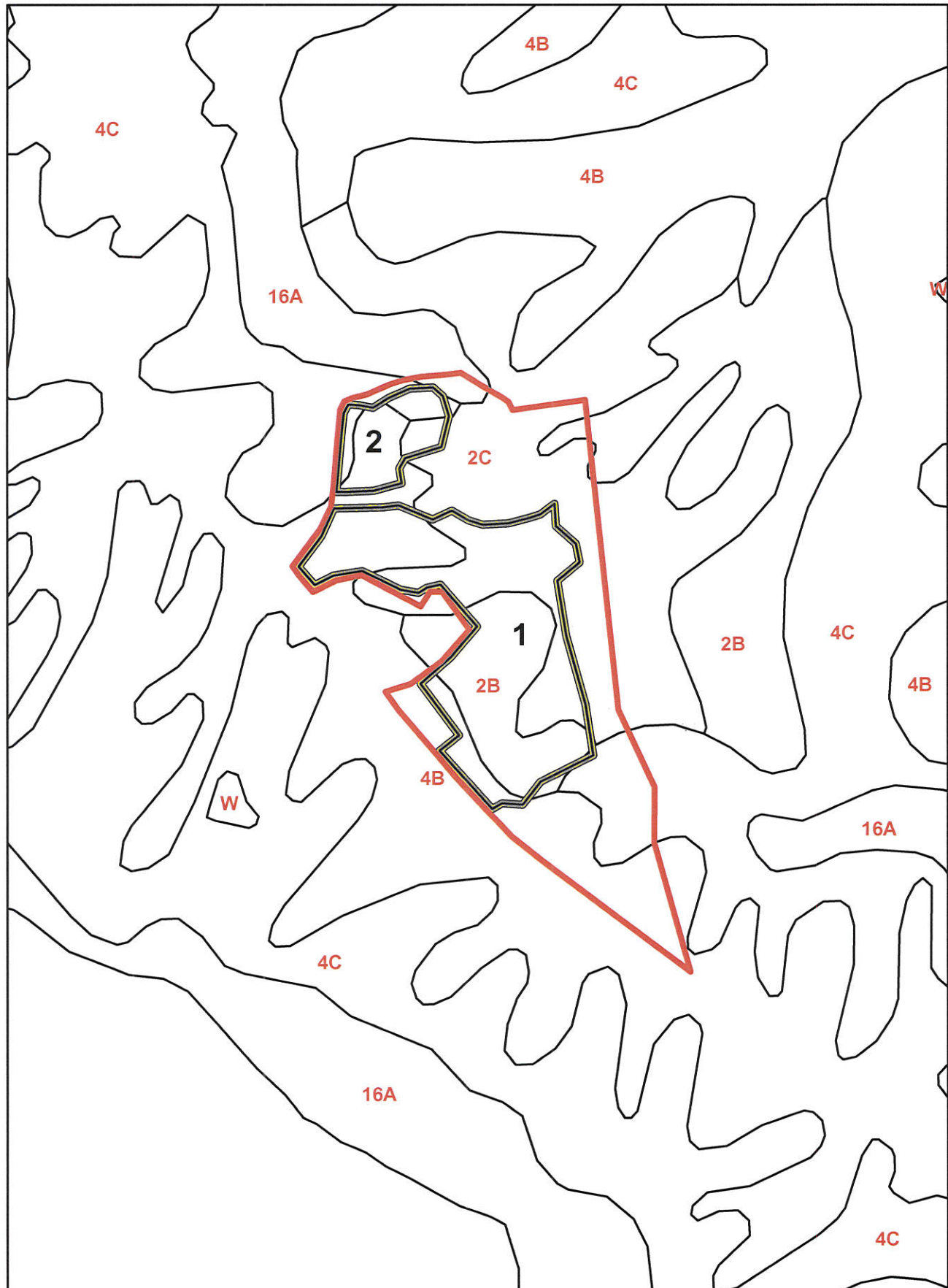
---

**DINWIDDIE COUNTY**

---

<b>Tax Map</b>	<b>Parcel #</b>	<b>Owner Name(s)</b>
78	3	Earl Alan and Wran M. Mullis
	3C	Hugh T. Rogers
	3E	Earl Alan and Mayme W. Mullis
	4B	Barnes Living Trust
	5A	William S. Killpatrick
	5A1	Adam G. Rice and Sarah Kenturah
	8C	Kimberly Whitehurst
	9E	John I and Meryl B. Harris



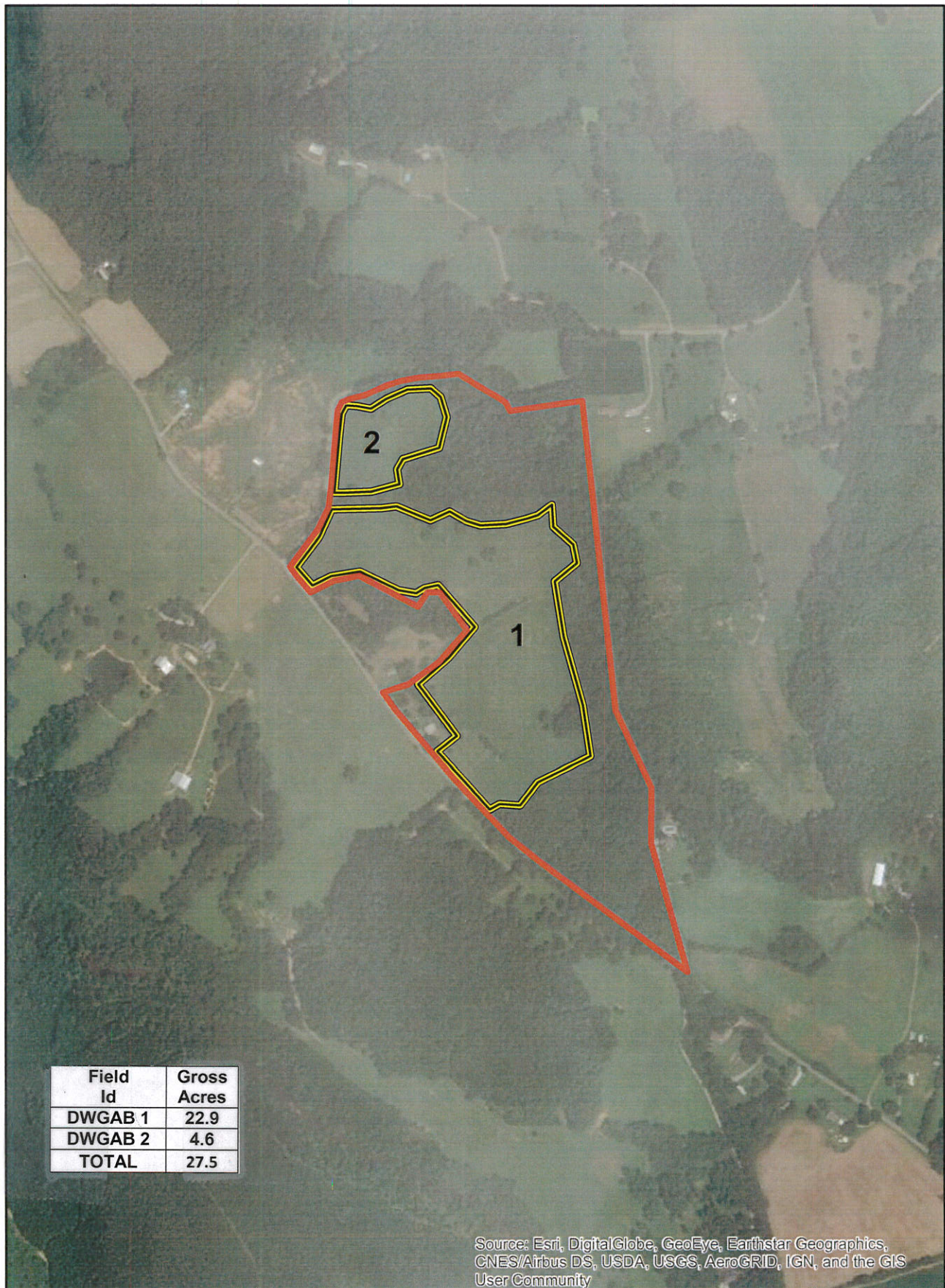


12-3-19  
Frequently  
Flooded

Soil Map

1 in = 660 feet





12-3-19

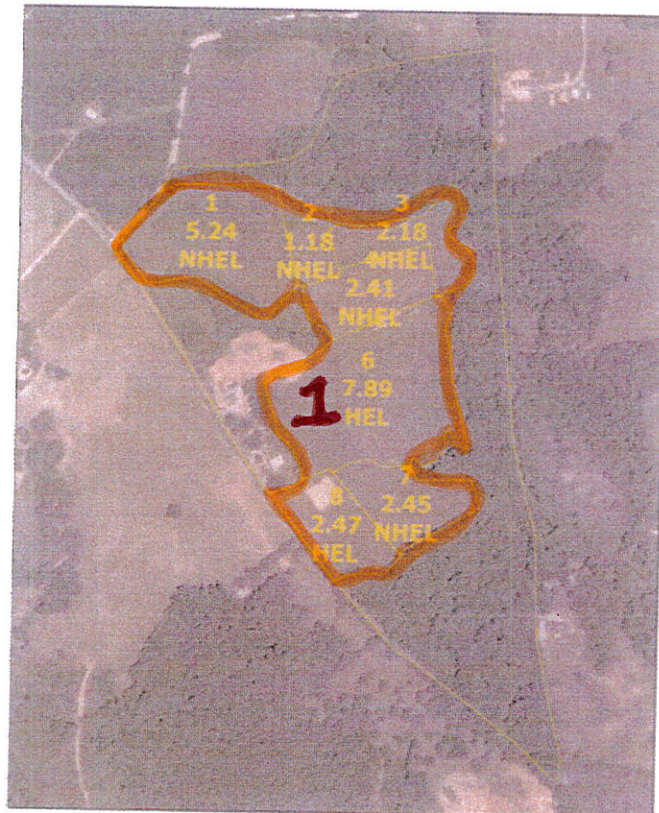
Aerial Map

1 in = 660 feet





USDA



Tract 477 0 185 370 740 1,110 1,480 Feet

Customer provided information not represent the scale, shape or specific determination of the land. Refer to your original determination. USDA (US) and other third parties for exact wetland boundaries and determinations of correct NHDIS.

**Tract # 477**

**Scale:** 1 inch = 660 feet

DWGAB 1

**AERIAL MAP**





USDA



Tract 5455 0 160 320 640 960 1,280 Feet

This aerial photograph was used to represent the size, shape or specific determination of the area. Refer to your original description (CDE 628) and attached maps for map-related boundaries and determinations, or for other policy.

**Tract # 5455**

**Scale:** 1 inch = 660 feet



DWGAB 2

**AERIAL MAP**

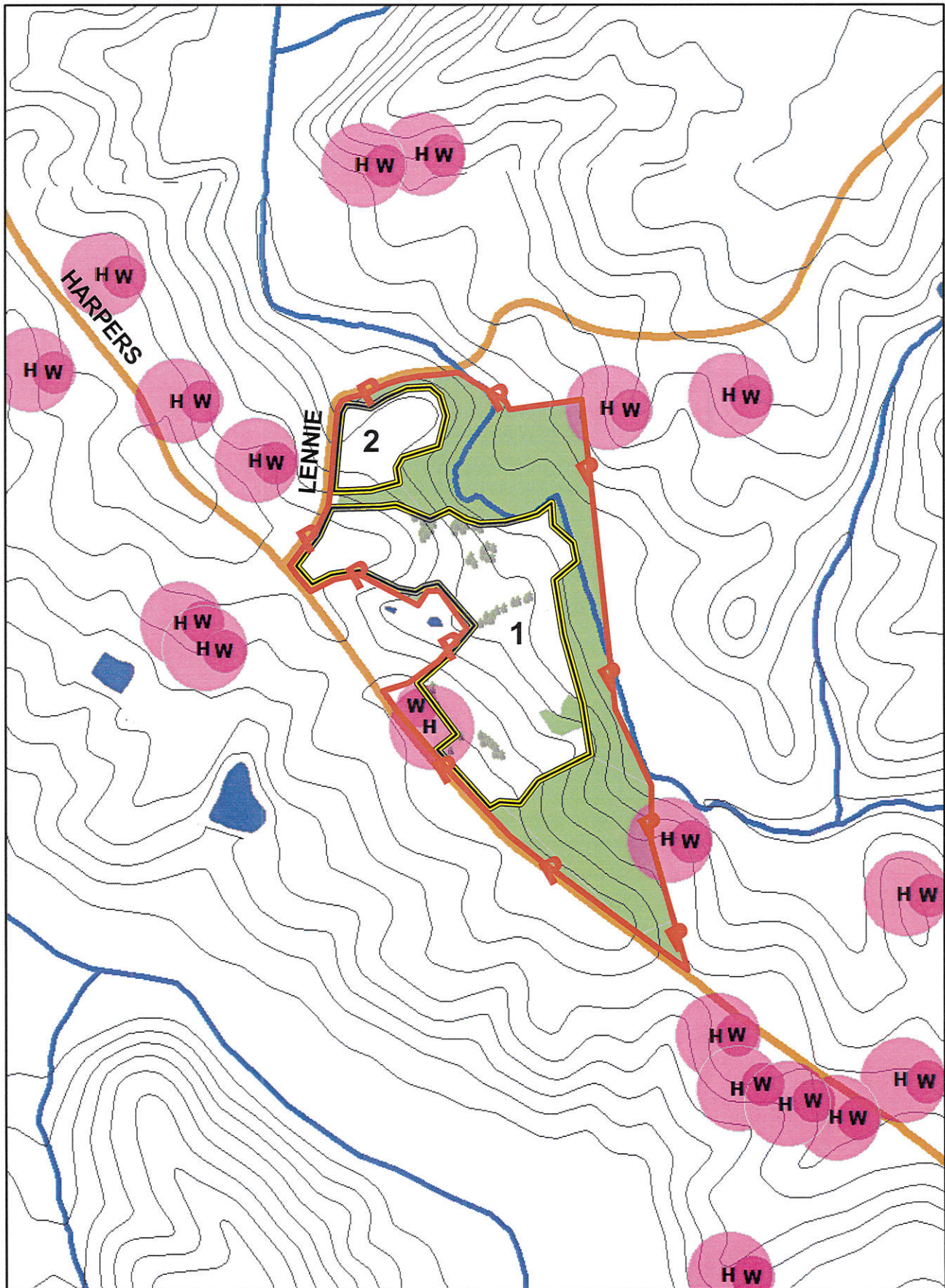




# Legend For Site Plan

Symbol	Feature	Minimum Setback
	House and Well	200 feet from occupied dwelling * 100 feet from water supply wells or springs
 	Well or Spring	100 feet from water supply wells or springs
	Streams or Surface Water	35 feet with 35 foot vegetated buffer 100 feet without vegetated buffer
	Wet Spot	
	Trees and Woods	
	Private Drive	
	Rock Area/Rock Outcrop	25 feet from rock outcrops 50 feet from limestone rock outcrops
	Severely Eroded Spot	18 Inch minimum depth of soil
  	Sink Hole	100 feet from open sinkholes 50 feet from closed sinkholes
	State Road	10 feet from side of roadway
	Fence / Field Boundary	
	Property Line	100 feet from property line *
 	Slope	15% maximum
	Hashed out Area	No application

\*Buffer can be reduced or waived upon written consent from landowner.



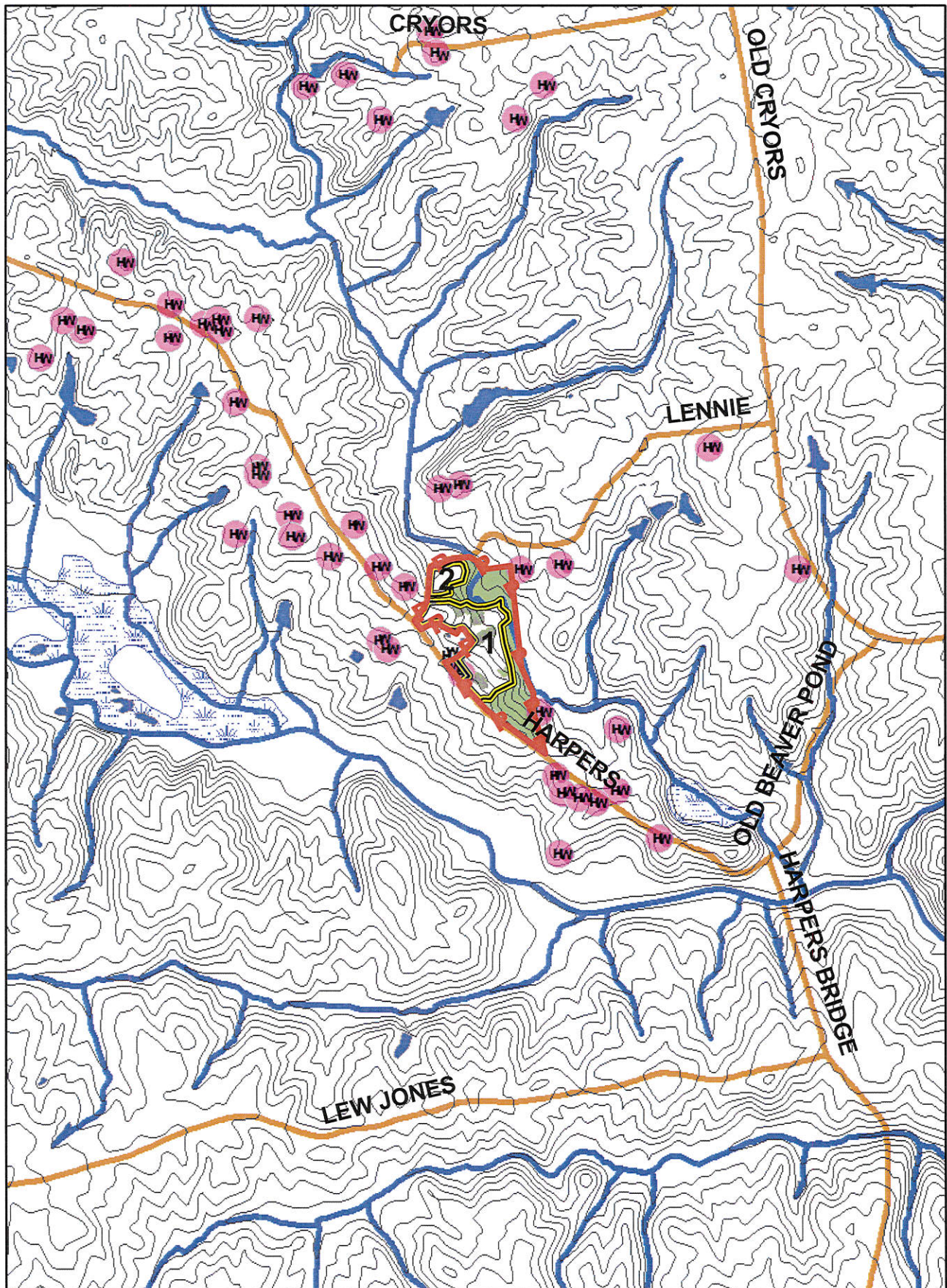
12-3-19

Site Map

1 in = 660 feet







12-3-19

Topographic Map

1 in = 2,000 feet



# RECYC SYSTEMS, INC

## FIELD DATA SHEET

Field Identification	DEQ Control ID	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
			Water Table	Bed Rock/ Shallow	Surf/ Leach	Freq Flood			
DWGAB 1	51053-00125-0000	22.9	-	-	-	-	CU 11	78-4	T 477 F 1, 2, 3, 6, 7, 8
DWGAB 2	51053-00126-0000	4.6	-	-	-	-	CU 11	78-3B	T 5455 F 2
TOTAL ACRES IN SITE		27.5							

12-3-19



THE PLANNER IS NOT STATE CERTIFIED

***Nutrient Management Plan Balance Sheet***  
***(Spring, 2020-Summer, 2022)***  
***Gordon Allie Barnes***  
***Planner: John Doe***

Tract: 477      Location: Dinwiddie  
(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
1, 2, 3, 6, 7, 8/DWGAB 1(N)	23/23	2020	Fescue grass hay mt.	70-50-95	0/0				70-50-95	N/A			

Commercial Application Methods:  
br - Broadcast ba - Banded sd - Sidedress

Notes:

Tract: 5455

Location: Dinwiddie

(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
2/DWGAB 2(N)	5/5	2020	Fescue grass hay mt.	90-80-170	0/0				90-80-170	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

**Soil Test Summary**

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec. lime tons/Ac
477	DWGAB 1	23	[No Test]						
5455	DWGAB 2	5	[No Test]						

### **Field Productivities for Major Crops**

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
477	477/1, 2, 3,	DWGAB 1	23	Appling	IVa	II	III	III	
5455	5455/2	DWGAB 2	5	Cecil	IVa	II	III	II	

### **Yield Range**

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA



## Farm Summary Report

**Plan:**            **New Plan**        **Spring, 2020 - Summer, 2022**

**Farm Name:**    **Gordon Allie Barnes**

Location:        Dinwiddie

Specialist:      John Doe

N-based Acres: 27.5

P-based Acres: 0.0

**Tract Name:**    **477**

FSA Number:    477

Location:                Dinwiddie

**Field Name:**     **DWGAB 1**

Total Acres:    22.90    Usable Acres:   22.90

FSA Number:    1, 2, 3, 6, 7, 8

Tract:            477

Location:                Dinwiddie

Slope Class:    B            Hydrologic Group:    B

Riparian buffer width: 0 ft

Distance to stream: 0 ft

### **Conservation Practices:**

Pasture (>75% cover)

### *P-Index Summary*

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

### **Soil Test Results:**

DATE	PH	P	K	Lab
[NO TEST]				

### **Soils:**

PERCENT	SYMBOL	SOIL SERIES
---------	--------	-------------

39	2B	Appling
35	2C	Appling
26	4B	Cecil

**Field Warnings:**

**Tract Name:** 5455  
**FSA Number:** 5455  
**Location:** Dinwiddie

**Field Name:** DWGAB 2  
**Total Acres:** 4.60 **Usable Acres:** 4.60  
**FSA Number:** 2  
**Tract:** 5455  
**Location:** Dinwiddie  
**Slope Class:** C **Hydrologic Group:** B

Riparian buffer width: 0 ft  
 Distance to stream: 0 ft

**Conservation Practices:**  
 Pasture (>75% cover)

*P-Index Summary*  
 N-based  
 Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

**Soil Test Results:**

DATE	PH	P	K	Lab
	[NO TEST]			

**Soils:**

PERCENT	SYMBOL	SOIL SERIES
20	2C	Appling
45	4B	Cecil
35	4C	Cecil

**Field Warnings:**

